Government of Saskatchewan

Annual Report 2004-2005

Saskatchewan Watershed Authority

Saskatchewan Centennial 2005

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Letter of Transmittal

Regina, Saskatchewan

The Honourable Dr. Lynda M. Haverstock
Lieutenant-Governor of Saskatchewan

Your Honour:

I have the honour to submit herewith the Annual Report of the Saskatchewan Watershed Authority for the period ending March 31, 2005, including financial statements for the year audited by the Authority's auditor in a form approved by Treasury Board, all in accordance with *The Saskatchewan Watershed Authority Act*.

David Forbes
Minister Responsible
Saskatchewan Watershed Authority
July 29, 2005

President's Message

The Honourable David Forbes
Minister Responsible
Saskatchewan Watershed Authority

Sir:

I am pleased to provide this report on the accomplishments and activities of the Saskatchewan Watershed Authority for the year ending March 31, 2005.

During the reporting period, the Authority made significant progress towards our strategic goals and objectives. Among our accomplishments:

- We advanced the Watershed and Aquifer Planning process, completing the establishment of local planning committees in seven key areas. The first of the completed watershed and aquifer plans are expected to be released before the end of the 2005 - 2006 reporting period.
- We launched a public consultation on water conservation with the release of *Conserving Our Water - A Water Conservation Plan for Saskatchewan - A guide for public discussion*. Citizens were invited to participate in eight public meetings, by mail, or through the Authority website. A completed water conservation plan will be released before the end of the 2005 - 2006 reporting period.
- We invested $2.8 million in the rehabilitation of the Province's water management infrastructure, including the final phases of improvements to the Avonlea Dam and repairs to outlet gates at the Alameda Dam.

Our accomplishments during the reporting period have enhanced the Authority's capacity to fulfill our mandate to manage and protect water quantity and source water quality for Saskatchewan citizens.

Stuart Kramer

Stuart Kramer
President
Saskatchewan Watershed Authority
July 29, 2005

Introduction

This Annual Report describes actual results for the key actions and performance measures that were published in the 2004 - 2005 Performance Plan, which was released to the public in March 2004. This was the first time the Saskatchewan Watershed Authority issued an annual Performance Plan. Although the 2003 - 2004 Annual Report was structured to reflect the Authority's Strategic Plan, this year will mark the first occasion that the Annual Report is directly tied to key actions and performance measures specifically set forth for the reporting period.

Reporting on actual year end results, both financial and performance, and comparing them to the plan released at the start of the year enhances public accountability. This improvement to our performance reporting is consistent with the continuing implementation of the Government's Accountability Framework.

The Saskatchewan Watershed Authority's 2005 - 2006 Performance Plan was released with the Provincial Budget, March 23, 2005. All Authority Performance Plans and Annual Reports are available on our website (www.swa.ca/AboutUs/PerformancePlans.asp).

Who We Are

In October 2002, as a result of Saskatchewan's Long Term Safe Drinking Water Strategy, the Saskatchewan Watershed Authority was formed to manage and protect water quantity and source water quality in Saskatchewan.

Vision

Excellence in Watershed Management
Promoting Safe, Sustainable Water Supplies
in Healthy Ecosystems

Mandate

To manage and enhance the province's water and watershed resources for the environmental, economic and social benefit of citizens

To manage surface water supplies, the Authority owns and operates 45 dams and 130 kilometres of conveyance channels plus ancillary works. The Authority makes significant investments in rehabilitation and upgrading of this infrastructure each year. The Authority provides hydrology expertise to determine water supplies, guide allocations, and predict floods. All major water allocations, including municipal, industrial, irrigation, and intensive livestock uses, must be approved by the Authority. Authority staff also represent Saskatchewan on trans-boundary water issues.

Much of Saskatchewan depends on groundwater for domestic, industrial and agricultural uses. To protect this resource, the Authority licenses all but domestic users to ensure new development does not impact existing users, conducts studies to determine groundwater supplies, and provides information to citizens and industry to help locate groundwater supplies.

The Authority's water control program supports agriculture by helping to maintain the productivity of flood prone land and to address water erosion issues. The Authority also hears formal complaints about drainage causing damage and may rule and enforce remedies, such as ditch blocks.

Watershed and aquifer planning has been initiated in seven areas to protect source water. The Authority's stewardship and extension programs help landowners improve watershed health through restoration of riparian areas, protection of wetlands and grasslands, and encouragement of management practices which assist fish and wildlife and protect water sources.

Assessing the health of the watersheds is an essential aspect of source water protection. The Authority is currently developing a plan for State of Watershed Reporting.

Public support and participation is essential to efforts to protect source water. The Authority therefore works with partners in the Safe Drinking Water Strategy to deliver education and information programs to create awareness and understanding of water and watershed issues.

To assist the Authority in achieving its goals and objectives, an Advisory Committee (see Appendix 1), with representatives from stakeholder and interest groups throughout the province, brings wide-ranging expertise on source water issues. The committee met three times during the year and provided helpful advice on a number of issues including changes to the Authority's legislation, planned changes to the drainage complaints process, development of a water conservation plan and monitoring programs including State of Watershed Reporting.

Legislative Responsibilities

The Saskatchewan Watershed Authority administers and is responsible for the following legislation:

- *The Saskatchewan Watershed Authority Act*
- *The Conservation and Development Act*
- *The Ground Water Conservation Act*
- *The Water Power Act*
- *The Watershed Association Act*

Legislation was introduced in the Spring 2005 session of the Legislature which will, among other amendments, repeal *The Ground Water Conservation Act* and incorporate its provisions within *The Saskatchewan Watershed Authority Act*.

Funding Resources

As a Crown Corporation, the Saskatchewan Watershed Authority relies on several revenue sources, including:

- grants from the province's General Revenue Fund
- water rental charges through *The Water Power Act*
- industrial water use charges
- grants from Saskatchewan Environment, Fish and Wildlife Development Fund, and
- contracts with government and non-government agencies and associations, and other sources

Organization of the Authority

The Saskatchewan Watershed Authority is a Treasury Board Crown Corporation headed by a President reporting to a Board, with a Minister Responsible for the Saskatchewan Watershed Authority. As of March 31, 2005, the one-person Board is Lily Stonehouse, Deputy Minister of Environment. The Minister Responsible for the Saskatchewan Watershed Authority is the Honourable David Forbes.

At the end of the reporting period, the Saskatchewan Watershed Authority had 183 employees (178.4 Full Time Equivalents). The Authority's head office is located in Moose Jaw, but many services and programs are delivered through its regions and other offices located in Nipawin, North Battleford, Prince Albert, Regina, Saskatoon, Swift Current, Weyburn and Yorkton. The Authority's organizational structure is shown in Appendix 1.

The Corporate and Human Services Division also provides human resources, finance, administration, legal and information systems support to SaskWater on a contractual basis.

2004 - 2005 Results at a Glance

Summary of Performance Results

The goals and objectives in the Watershed Authority's first performance plan (2004-05) articulate the outcomes the Authority is pursuing. The following section provides a summary of key accomplishments for the Authority in 2004-05.

GOAL 1 - Safe and Sustainable Water Supply

- The earthwork at Avonlea Dam was completed and the dam now meets safety standards.
- Repairs to the Cowan Lake Control Structure were substantially completed.
- Rehabilitation work at the Katepwa Weir and Lac La Ronge control structure was deferred until 2005.
- The two outlet gates at the Alameda Dam were repaired.
- During the year, $1,500,000 was devoted to the maintenance and operation of the Authority's infrastructure and the risk ratio for this infrastructure declined from 0.147 to 0.141.
- There were significant concerns raised about a water allocation to TransGas for constructing underground caverns for natural gas storage near Asquith. The Authority increased monitoring, moved ahead a planned shutdown, investigated water quality, contracted an independent review by Saskatchewan Research Council and revised the permit conditions to TransGas based on this review.
- The Authority participated in discussions with Canada and the Qu'Appelle Valley First Nations regarding the operation of water control structures at Echo, Crooked and Round lakes. An agreement to enable the operation of the structure at Echo Lake was finalized early in the year; however, no agreement was reached for the structures at Crooked and Round Lakes.
- Approximately 300 people attended public consultations to guide the development of a water conservation strategy.
- A joint proposal with the Saskatchewan Research Council to the National Water Supply Expansion Program for groundwater mapping and resource assessment on two mapsheets in southwest Saskatchewan was successful. Work has been initiated and the two maps are scheduled to be completed by March 31, 2006.
- The Authority reviewed the Flood Hazard Design Flows below Gardiner Dam and revised the 1 in 500 year flood projection for the South Saskatchewan River.

GOAL 2 - Healthy Watersheds and Aquifers

- A total of 20 planning committees with about 400 local members are actively working on source water protection planning.
- The Authority has prepared draft State of the Watershed Report indicators and anticipates publishing its proposed indicators in the State of the Watershed Reporting Framework in the fall of 2005.
- The Authority assisted the Four Creeks watershed to initiate the first equivalent environmental farm plan, focused on protecting water.
- During 2004, proposals approved under the North American Waterfowl Management Plan by the various partners in the plan raised $20,196,000, including $13,800,000 from sources in the United States, for conservation work in Saskatchewan.

- During the year, more than 700 educators participated in Climate Change, Project WET, and Project WILD training.

Summary of Financial Results

During the 2004 - 2005 year, the Saskatchewan Watershed Authority generated an operating surplus of $142,000 compared to a surplus of $2,024,000 in the prior year. The revenues for the current year totaled $20,200,000 (2003-2004 – $21,426,000) and expenses were $20,058,000 (2003-2004 – $19,402,000).

The decrease in revenues is due to reduced funding from the General Revenue Fund (infrastructure rehabilitation program) and reduced revenue from SaskPower under *The Water Power Act*. Expenses have increased due to costs incurred in negotiating an interim operating agreement with the Pasqua and Muscowpetung First Nations relating to the Echo Lake water control structure, the study undertaken on the Yorkton Aquifer, and amortization of tangible capital assets related to the pumping equipment transferred to the Authority on June 30, 2004.

2004 - 2005 Performance Results

The 2004 - 2005 fiscal year marked the first year the Authority published a Performance Plan and is now reporting on that plan. The annual performance information is used to assess overall progress towards goals and objectives each year, and in turn, to assist in setting priorities for the 2005 - 2006 fiscal year. Our work plans for the 2005 - 2006 year are set out in our Performance Plan which is available at our website (www.swa.ca).

The key actions originally presented in our 2004 - 2005 plan follow, along with a report on actual progress for each. Actual results are included for all key actions and performance measures that were published in our 2004 - 2005 Performance Plan as well as for all commitments related to the Saskatchewan Watershed Authority in the government-wide 2004 - 2005 Performance Plan Summary.

Goal 1: Safe and Sustainable Water Supply

Objective 1: *Water Management Infrastructure Is Safe and Meets Operational Requirements*

The Authority is responsible for the operation and maintenance of 45 dams, and approximately 130 kilometres of conveyance channels, and other water management infrastructure throughout the province. These works provide essential water management functions including water for municipal and industrial use, irrigation, hydroelectric power generation, flood control, wildlife, and recreation. Four of the dams, Gardiner, Qu'Appelle, Rafferty and Alameda, would have major consequences from downstream flooding, including property damage and risk of loss of life, if they failed. The current estimated replacement cost of the Authority's infrastructure is $1.37 billion.

Over 50 percent of the Authority's structures are 35 years old or more. Not only has their physical condition declined over time, but in many instances, the criteria used for their design falls well short of today's standards. In addition, at the time of project development, potential impacts on fish were not as great a concern as today. Aside from the need to ensure structural integrity, fish passageways need to be constructed at some facilities and improved at others.

The Authority is continuing to make progress in reducing the backlog of needed rehabilitation to bring all dams up to current safety standards. The performance measure shows a modest improvement in the risk ratio and design work completed will allow further improvements during the 2005 - 2006 fiscal year.

Key Results

Proceed with capital expenditures to ensure that water infrastructure is safe

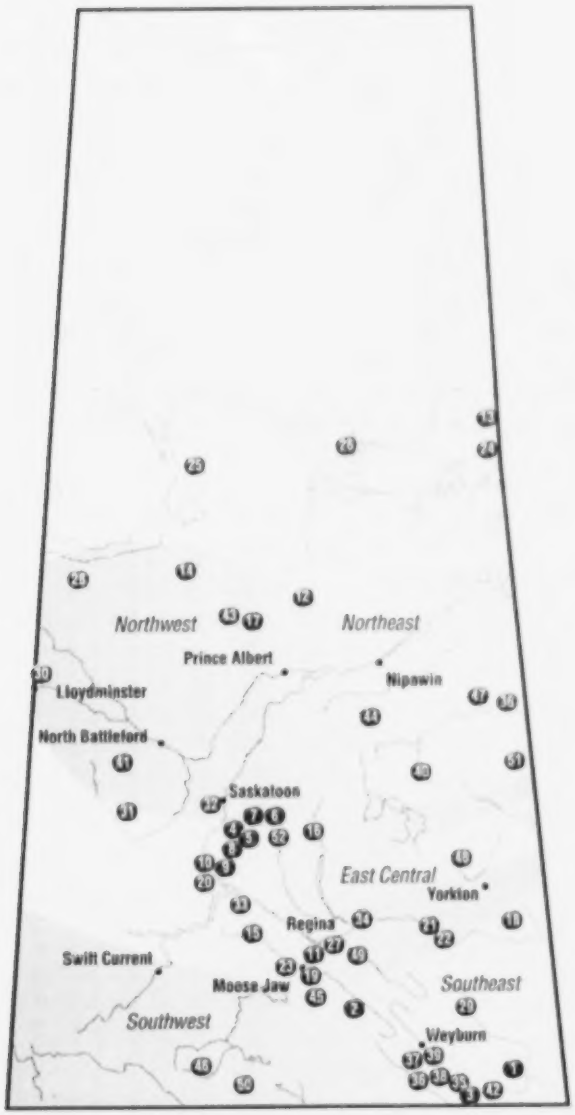
Complete rehabilitation work at Alameda, Avonlea and Cowan Lake dams and Emma Lake Diversion Canal. [2004 - 2005 planned result]

The earthwork at Avonlea Dam was completed at a cost of $573,400 and the dam now meets safety standards. Repairs to the Cowan Lake Control Structure were substantially completed at a cost of $211,000 and the two outlet gates at the Alameda Dam were repaired. Work on the Emma Lake Diversion canal included construction of a weir to prevent fish from becoming stranded in the channel.

Proceed with the rehabilitation of the Lac La Ronge Control Structure and river bank stabilization and pump station upgrading at the Pike Lake Project. [2004 - 2005 planned result]

Rehabilitation design was completed for the Lac La Ronge structure and the work publicly tendered. A $1,268,664 contract was awarded in November and work is scheduled for completion by October 31, 2005. Facilities at the Pike Lake Project were upgraded to enable easier installation and improved operation of the river pumps. A fish screen at the outlet of the lake was designed, fabricated, and installed.

Complete final project designs for spillway rehabilitations at Hugonard and Theodore dams. Prepare preliminary design for the Upper Qu'Appelle Conveyance Project and a final design for Year 1 construction of that project [2004 - 2005 planned result]



1. Alameda Dam and Associated Facilities
2. Avonlea Dam
3. Boundary to Rafferty Diversion Channel
4. Blackstrap North Dam
5. Blackstrap South Dam
6. Bradwell East Dam
7. Bradwell West Dam
8. Brightwater Creek Dam
9. Broderick East Dam
10. Broderick West Dam
11. Buffalo Pound Dam
12. Candle Lake Control Structure
13. Chicken Lake Dam
14. Cowan Lake Dam
15. Darmody Dam
16. Dellwood Brook Dam
17. Emma Lake Diversion (Anglin Lake Pump Station)
18. Esterhazy Dam
19. Five Mile Dam
20. Gardiner Dam
21. Hugonard Dam
22. Katepwa Lake Control Structures
23. Kingsway Dam
24. Kipahagan Dam
25. Lac la Plonge Control Structure
26. Lac la Ronge Control Structure
27. Lumsden Floodway
28. Makwa Lake Control Structure
29. Moose Mountain Dam
30. Northminster Effluent Reservoir
31. Opuntia Lake Dam
32. Pike Lake Pump Station
33. Qu'Appelle River Dam
34. Qu'Appelle River Conveyance Channels
35. Rafferty Dam
36. Rafferty - Causeway 606
37. Rafferty - Causeway 705
38. Rafferty Closure Dam R3-2
39. Rafferty Closure Dam R4-1
40. Round (Sinfield) Lake Control Structure
41. Scott Dam
42. Souris River Conveyance Channels
43. Spruce River Dam
44. Star City Dam
45. Stelcam Weir
46. Summercove Dam
47. Teepee Creek Dam
48. Theodore Dam
49. Wascana Lake Weir
50. West Poplar Dam
51. Woody Lake Weir
52. Zelma Dam

Figure 1 – Water Control Infrastructure

At Hugonard Dam repairs were completed including installing a liner in the corrugated metal conduit of the drop inlet spillway, repairs to the concrete stilling basin, and the dam crest grade. Design work for Theodore repairs was initiated. In 2004 - 2005, work continued on engineering and environmental investigations and studies to develop a conveyance project design and proposal, which would accommodate water demands reasonably anticipated over the next 30 years. Meetings with landowners and other project stakeholders were also held throughout the year.

Manage the risk associated with water management infrastructure

Ensure the continuing safety of the Authority's dams by initiating a dam break analysis of Alameda Dam, and completing comprehensive inspections of Bradwell East, Bradwell West, Cowan Lake, Northminster, Scott and Theodore dams. [2004 - 2005 planned result]

In 2004 - 2005, safety inspections were conducted at the following dams: Bradwell East, Bradwell West, Theodore, Cowan Lake, Makwa Lake, Scott, and Northminster. At year end a consulting agreement was issued for dam break analyses of both Rafferty and Alameda dams.

Maintain and operate the Authority's water management infrastructure by, among other actions, undertaking technical maintenance activities including measuring and analyzing instrumentation and survey data at Gardiner, Qu'Appelle, Rafferty, Alameda, Buffalo Pound, Avonlea, Theodore and Northminster dams, and performing physical maintenance activities at Gardiner, Qu'Appelle, Rafferty and Alameda dams as identified in the Authority's five-year Operations and Maintenance Plans. Project maintenance at other infrastructure to be undertaken on an as-needed basis. [2004 - 2005 planned result]

Maintenance was performed at the Authority's four major structures in accordance with five-year Operation and Maintenance plans, and at other structures on an as-needed basis. During the year, $1,498,000 was devoted to the maintenance and operation of the Authority's infrastructure.

Ensure that the Authority's water management infrastructure can satisfy operational objectives by inspecting all infrastructure at least once during the year and by assessing the conveyance capacity of 20 percent of the Authority's constructed channels (Last Mountain Lake to Pasqua Lake in 2004 - 2005). [2004 - 2005 planned result]

During the reporting period, 38 of the Authority's 45 dams were inspected. Stream flow metering and stage-discharge measurements were undertaken along the Qu'Appelle River between Last Mountain Lake and Pasqua Lake to confirm the current conveyance capacity of this river reach.

Initiate work on a policy regarding ecosystem needs for a new and rehabilitated infrastructure. [2004 - 2005 planned result]

No activity was undertaken on this multi-year action. After further analysis, this key action has been revised and will commence next year.

Measurement Results

Risk Associated for the Province's Water Management Infrastructure

Preventing failure of structures and maintaining safety is an essential part of this objective. The Authority uses a ratio of the assessed risk to the total possible risk to establish targets and to measure progress in reducing risk associated with its infrastructure. Risk, defined as the likelihood of a failure multiplied by the consequences of a failure, has been assessed in relative values. Numerically the risk ratio can be expressed as:

$$\text{Risk Ratio} = \frac{\text{Assessed Current Risk}}{\text{Total Possible Risk}}$$

Authority engineers calculate this ratio at the end of the fiscal year. The ratio declined from 0.147 to 0.141 through the fiscal year due to the Authority's infrastructure rehabilitation activities.

	March 2003	March 2004	March 2005
Risk Ratio	0.190	0.147	0.141

Source: Authority annual assessment of infrastructure risk.

The number of dams requiring significant upgrades to meet dam safety standards.

The Saskatchewan Watershed Authority owns 45 water control structures. The Authority uses criteria established by the Canadian Dam Association to assess the safety of its structures.

The number of dams assessed to have dam safety deficiencies remained static at 27 over the year. This was largely due to the deferral, until 2005 - 2006, of planned project rehabilitation work at Katepwa Weir and the Lac La Ronge Control Structure; less than full completion, by year end, of rehabilitation work at Cowan Lake Dam; and a re-assessment of the safety status of Bradwell East Dam.

	March 2003	March 2004	March 2005
Dams requiring upgrades	29	27	27

Source: Authority annual assessment of infrastructure risk.

Goal 1: Safe and Sustainable Water Supply

Objective 2: *Water Supply is Reliable*

Water is an essential resource. Saskatchewan people use water for drinking and other domestic uses, as well as for a range of agricultural, industrial and recreational uses.

The Province has a long history of allocating supplies for various uses that remove water from the source water bodies, such as for domestic, municipal, industrial, and irrigation purposes. Our objective, in controlling water use, is to ensure needs are met and a new user does not take water already depended on by another person or business. Instream use of water for the maintenance of aquatic ecosystems is also required.

Operation of provincial projects, such as the Authority's major dams and SaskPower's hydro operations, requires careful planning to achieve project objectives and minimize negative impacts on other uses of the resource. Reliable and extensive data are essential to the forecasting required for operation planning.

Key Results

Ensure that water uses are known and efficiently allocated

Develop and implement a water use monitoring program to ensure actual municipal, industrial and agricultural water use is known and is within the allocated amount. [2004 - 2005 planned result]

A water use monitoring policy was developed and work initiated to update the Authority's surface water database to determine the amount of water being used compared to the amount allocated. A number of project operators were contacted and field inspections completed to determine if approved projects are still operating. All new water use approvals issued by the Authority include special conditions which require the project operators to maintain a record of actual water use and report the use to the Authority when requested.

As part of the provision of information on water supplies to promote socioeconomic development, the Authority will meet 90 percent of groundwater information enquiries on a same day basis. [2004 - 2005 planned result]

In 2004 - 2005, the Authority received approximately 1,200 requests for groundwater information and 400 for groundwater regulatory information. Almost all were handled on a same day basis.

Represent provincial water management interests to meet First Nations, interprovincial and international obligations through participating in negotiations with Qu'Appelle Valley First Nations to resolve flood claims; attending Prairie Provinces Water Board and Mackenzie Basin Board meetings; initiating discussions toward establishment of a bilateral agreement between Alberta and Saskatchewan under the Master Agreement on the Mackenzie River Basin; participating in the release of the first State of the Aquatic Ecosystem Report for the Mackenzie Basin; attending meetings, helping arrange for new appointments and assisting with implementation of new mandate of the International Souris River Board; and, participating in the International Joint Commission review of the apportionment of the St. Mary and Milk rivers [2004 - 2005 planned result]

The Authority represents Saskatchewan on a number of interjurisdictional water management boards to ensure that the terms and conditions of various water sharing agreements are met.

These include:

- Prairie Provinces Water Board
- Mackenzie River Basin Board
- International Souris River Board of Control
- Poplar River Bilateral Monitoring Committee
- Milk River International Alliance

The Authority participated in discussions with Canada and the Qu'Appelle Valley First Nations regarding the operation of water control structures at Echo, Crooked and Round lakes. An agreement to enable the operation of the structure at Echo Lake was finalized early in the year; however, no agreement was reached for the structures at Crooked and Round lakes.

Negotiations initiated in the latter part of 2004 are expected to result in an agreement to operate the Echo Lake structure in 2005 and 2006.

In July 2004, the International Joint Commission held public meetings in Montana, Alberta and Saskatchewan to determine interest and concern with the potential review of the 1921 Order regarding water sharing procedures for the St. Mary and Milk rivers. The Authority presented a brief supporting the current Order. In January 2005, the Commission established a task force to examine the existing water sharing administrative procedures and determine if there is a more beneficial way to share the water within the terms of the 1921 Order. The Task Force, which includes the Authority's Vice-President of Operations, will report its findings to the International Joint Commission in the summer of 2005.

Direct the operations at all Authority dams and water flows at SaskPower's hydroelectric generating facilities and advise Prairie Farm Rehabilitation Administration on the operations of the Qu'Appelle River structures. [2004 - 2005 planned result]

The Authority managed its own 45 water control structures, and directed the water supply management of 20 federally owned reservoirs and related diversion works located on provincial, inter-provincial and international streams, to meet irrigation, municipal and domestic water use demands, and international apportionment obligations.

Address knowledge and information requirements to maintain a reliable water supply

Lead efforts to improve public knowledge of problems presented by abandoned wells and the need for proper decommissioning of these wells. Opportunities for the development of a provincial or federal/provincial well decommissioning program will be pursued. [2004 - 2005 planned result]

A proposal was submitted to the National Water Supply Expansion Program for funding to undertake a series of well decommissioning demonstrations. A decision was not received by the end of the fiscal year. However, the Authority continues to work with the Saskatchewan Groundwater Association (provincial water well drillers) on this issue. A well closure demonstration was conducted near Yorkton.

Develop a water use conservation strategy in consultation with other departments and interest groups including Saskatchewan Association of Rural Municipalities, Saskatchewan Urban Municipalities Association, Saskatchewan Irrigation Projects Association and industry representatives. [2004 - 2005 planned result]

Public consultations to guide the development of a water conservation strategy were held in February and March 2005. Approximately 300 people attended meetings in Regina, Yorkton, Swift Current, Saskatoon, Prince Albert, La Ronge, North Battleford and Beauval.

Seventeen individual and organizational briefs were submitted and 57 website-based survey responses were received.

Work on the plan will continue in 2005, with the public release of a water conservation strategy anticipated in December.

Identify locations where water quality data and hydrometric station data are collected, re-evaluate their importance, assess the potential for integration, draft a report on integration and begin training staff to collect both hydrometric and water quality data. [2004 - 2005 planned result]

As an initial step towards integrating the collection of water quality and hydrometric data at monitoring stations, the Authority intends to establish a pilot project in 2005 along the Qu'Appelle River. This pilot will involve the collection of real time flow and water quality data at three sites. The information will be used to develop in-stream flow needs and examine the feasibility of expanding this program to other sites.

Provide information on water supplies to encourage large water use industries to locate where reliable water supplies are available. [2004 - 2005 planned result]

A beef slaughter facility, with a capacity of 200 head per day, is proposed by a Swift Current development group. The Authority confirmed that the City of Swift Current's water supply allocation is adequate to supply the needs of the proposed facility.

A Cypress Agri-Energy Ethanol facility, to be located east of Shaunavon, proposes using groundwater from several wells as its water source. The Authority provided water supply information and attended a project information open house.

Pine Cree Cattle Feeders is proposing a feedlot project to accommodate over 8,000 head of feeder cattle, with potential to add another 16,000 head. This project is expected to be integrated with the Cypress Agri-Energy proposal noted above. A Water Right License to Use Groundwater and Approval to Operate Works was issued in 2004.

The Authority developed a water supply model for the Big Stick Lake watershed in southwest Saskatchewan. The model can evaluate various water use scenarios to optimize economic and environmental benefits for the watershed. A final report summarizing the findings of the water supply study is expected in early 2005 - 2006, with a public review to occur by fall of 2005.

The Authority participated on a steering committee to draft terms of reference and select a consultant to undertake a preliminary study of infrastructure requirements and the cost to develop a large irrigation project on the west side of the South Saskatchewan River between Gardiner Dam and Saskatoon. The Authority also coordinated a water supply evaluation to determine the availability of water for the project from Diefenbaker Lake. The study will consider various uses of water in the area and the economic value the proposed irrigation project could provide to the province. The study, initiated in February 2005, is expected to be concluded in December 2005.

To further delineate and quantify groundwater resources in agricultural Saskatchewan, the Piapot groundwater resource assessment pilot project will be completed by fiscal year end. In addition, one new groundwater resource assessment will be initiated and completed while support to ongoing groundwater mapping activities will be maintained. [2004 - 2005 planned result]

A joint proposal with the Saskatchewan Research Council to the National Water Supply Expansion Program for groundwater mapping and resource assessment on two mapsheets in southwest Saskatchewan was successful. Work has been initiated and the two maps are scheduled to be completed by March 31, 2006.

Complete an internal draft assessment of groundwater data collection activities and procedures and conduct a needs analysis [2004 - 2005 planned result]

During the year Saskatchewan Research Council and the Authority agreed to transfer provincial groundwater activities previously performed by the Saskatchewan Research Council, including the provincial observation well network, to the Authority. This had a major impact on this planned result. Once the full scale of these activities is fully understood, a proper assessment of provincial groundwater data collection activities and procedures can be done.

In addition to these key actions, the Authority continued to regulate development that affects our water resources. Land drainage and surface and ground water use are regulated by *The Saskatchewan Watershed Authority Act*. Through issuing Water Rights to allocate water resources, and approving the construction of water control projects, annual diversions of water are allocated for municipal, industrial, irrigation and other uses. Regulating the use of water ensures approvals are given only to those developments where there is a sustainable supply of water.

A significant amount of staff time was spent addressing a specific temporary allocation to TransGas Limited for the purpose of developing underground caverns for natural gas storage near Asquith. In response to local concerns, the Authority and TransGas Limited agreed to a number of activities including:

- altering the original withdrawal timetable
- more detailed monitoring of impacts
- ensuring mitigative measures to impacted water supplies were sufficient
- investigating water quality issues in the area, and
- obtaining independent third-party review of the project

The following table indicates the activity level for surface and ground water.

		Permits/Approvals
		Surface Water
	Groundwater	Approval to construct
works	50	3
Water Rights	82	107
Approvals - private domestic dams	437	n/a

Measurement Results

Performance measures related to this objective were under development during 2004 - 2005.

Objective 3: *Flood Damage is Minimized*

Floods can impose significant costs in property damage and loss of production. The Authority works to minimize flood damage through the use of water management infrastructure and by predicting areas at risk of flooding to guide other departments, municipalities and business in reducing flood risk. The Authority continued to reduce risk by defining flood prone areas to guide proper development in flood plains and avoid the large costs in property damage which could otherwise occur in a major flood.

Key Results

Complete the necessary hydraulic analysis and draft the Alameda emergency preparedness plan, and update the Gardiner Dam emergency preparedness plan [2004 - 2005 planned result]

Work was initiated on an update to the Gardiner Dam emergency preparedness plan. The existing plan outlines expected flood levels downstream of the dam during high flow releases or resulting from a dam failure. It also outlines provincial government actions and responsibilities during these emergencies. Discussions have been held with provincial Emergency Planning officials and Authority staff. The revision will be completed in 2005 - 2006.

Alameda Dam, on Moose Mountain Creek, and Rafferty Dam, on the Souris River, do not have Emergency Preparedness Plans. A contract to develop flood mapping for the reaches of the rivers downstream of the dams has been awarded. The synthesized flood levels will be used to develop emergency preparedness plans for both Alameda and Rafferty dams.

Update the floodplain mapping for Regina, Moose Jaw and Estevan, [2004 - 2005 planned result]

In the 1980s, under the Canada-Saskatchewan Flood Damage Reduction Program, 25 communities were identified as flood prone. Studies were completed on most of these communities, identifying flood elevations for zoning to protect new development. The program was developed to encourage communities to use the flood elevations as a basis for zoning bylaws to restrict or eliminate new development in flood prone areas. Sixteen communities have proceeded to the final designation stage by passing zoning bylaws that respect flood hazard areas.

The Authority has been working closely with the communities of Estevan, Saskatoon, Regina, Moose Jaw and the Rural Municipality of Corman Park to develop new flood plain mapping and delineate flood prone areas. The City of Estevan has benefited significantly from the flood protection offered by Rafferty dam and reservoir. New flood plain mapping for the City of Estevan and the surrounding rural municipality has been drafted and reviewed with the city, and is close to being completed.

Portions of the City of Moose Jaw flood plain mapping did not have the flood fringe areas identified. These are areas where development may be allowed if the structures are adequately flood proofed. The Authority worked with the City of Moose Jaw to identify the areas where mapping was needed and initiated studies to complete the mapping.

The City of Regina continues to grow and develop in areas adjacent to Wascana Creek. Modifications to the flood plain mapping for the community continue to be made, as new river channel and site specific topographical information is obtained.

Improve public access to flood forecasts and water level information by improving the Authority's website (www.swa.ca) The Authority will enhance flood forecasting capabilities [2004 - 2005 planned result]

Significant website improvements have increased public access to flood forecasts and water level and flow information on a near real-time basis.

The Authority worked with Alberta Environment to enhance the transfer of streamflow and water level data gathered in Alberta. Through this work, the Authority was able to develop forecasts in a more timely fashion and with a greater degree of confidence. Also, in spring 2004, the Authority reviewed all of the streamflow forecast relationships developed using meteorologic data. Many of the relationships dated back to the 1980's. The relationship correlations were updated and new forecast equations were developed. This resulted in enhanced flood forecasting capabilities.

In 2004 and early 2005, there were no significant flood events which caused extensive flooding. As a result, the Authority did not have to release a streamflow advisory or flood warning, outlining potential flood situations.

Revise flood risk mapping along the South Saskatchewan River, downstream of the Gardiner Dam. [2004-05 planned result]

The Authority reviewed the Flood Hazard Design Flows below Gardiner Dam and revised the 1 in 500 year flood projection for the South Saskatchewan River. This meant that the flood plain mapping for Saskatoon and the flood plain delineation for the Rural Municipality of Corman Park needed revision. Significant progress on this project has been achieved.

Provide technical and financial support to Conservation and Development Area Authorities and Watershed Associations to maintain/rehabilitate locally owned existing water control infrastructure. [2004 - 2005 planned result]

The Authority provides administrative, investigative, financial and technical assistance to Conservation and Development Area Authorities, Watershed Associations, and municipalities for water and flood control projects that help alleviate flooding and drainage problems associated with agricultural lands.

Maintenance - Technical and financial assistance is available for weed and brush control, maintenance or replacement of water control structures and crossings, removal of silt and other obstructions. During the year, 53 local governments received more than $278,000 in grant assistance.

Channel Clearing - Assistance supports the removal of trees, brush, deadfall and other obstructions that cause flooding and erosion problems to roads and adjacent lands. In 2004 - 2005, 61 local governments were provided over $116,000.

Conduct a review of the Authority's water control program [2004 - 2005 planned result]

An internal review of water control programs was initiated during the year and will be completed in 2005 - 2006.

Measurement Results

The federal and provincial governments have established certain standards for determining flood hazard in the preparation of municipal zoning bylaws and mapped flood risk areas for 25 flood prone communities. The importance of the measure is that municipalities which follow a standard in designing their bylaws will be at little risk during floods. However, the Authority has little direct influence on municipal action.

	March 2004	March 2005
Number of urban municipalities adopting acceptable flood hazard zoning bylaws	16	16

Source: Bylaws of 25 municipalities identified as flood prone.

Goal 2: Healthy Watersheds and Aquifers

Objective 1: *Source Waters and Watersheds are Protected*

The people of Saskatchewan depend on both surface and ground water sources for their basic human needs and to generate economic activity. Proper siting of a water supply and aggressively protecting it from potential contaminants are keys to providing a safe water supply. A multiple barrier approach protecting water from source to tap is the most effective way to protect drinking water quality.

The Authority is responsible for leadership of activities related to protecting our surface and ground water sources. It made significant progress in watershed and aquifer planning, developing partnerships and projects that reflect best management practices, and toward development of a monitoring and reporting system to ensure the protection and restoration of the province's water sources.

Key Results

Watershed planning provides the basis for decision-making

Initiate source water protection plans through the formation of local advisory and technical committees in the Lower Souris, Upper Assiniboine, Moose Jaw, Upper Qu'Appelle, South Saskatchewan and North Saskatchewan watersheds, and the Yorkton aquifer. The assembly of information and the commencement of locally based dialogue around the protection of source waters will be among the key efforts. [2004 - 2005 planned result]

A total of 20 planning committees with about 400 local members are actively working on source water protection planning in the Lower Souris, Upper Assiniboine, Moose Jaw, Upper Qu'Appelle, South Saskatchewan and North Saskatchewan watersheds, and the Yorkton aquifer. For each area, local committees have been established to provide input and guide plan development. Technical teams of specialists from both public and private agencies are also assisting in plan development.

In most areas, representatives of 30 or more interest groups are actively meeting, developing objectives and in some cases, publishing newsletters, participating in "Know Your Watershed" tours, and seeking funding from third parties to support stewardship initiatives. The size and complexity of watersheds has resulted in the establishment of two to four sub-watershed advisory committees within each planning area. Ultimately, a single, comprehensive plan will be developed for each watershed or aquifer.

During 2004 - 2005, significant progress towards plan development has been achieved. Background reports designed to help participants understand the watershed have either been completed or are at an advanced stage in most of the planning areas. The advisory committees have made significant progress, and in some areas, planning objectives to address threats to source waters have been developed.

Develop and implement comprehensive management plans for Authority lands at Rafferty and Alameda, along the Carrot River and along the Qu'Appelle River (including Fairy Hill Marsh). Monitor and evaluate implemented plans at Quill Lakes and Chaplin Lake. [2004 - 2005 planned result]

Project at Fairy Hill Marsh was completed in the fall 2004 and producer grazing plans are ongoing. Carrot River land was assessed in fall 2003 and agreements negotiated in 2004. Rafferty and Alameda land was evaluated and management is ongoing.

Conduct watershed reporting

Undertake, in co-operation with Saskatchewan Environment, the preparation, publication and distribution of a State of the Watershed Reporting Framework. This Framework will form the template for future reports. It will outline proposed watershed scale, timing of reporting, priority of watershed reporting, indicators, and format. [2004 - 2005 planned result]

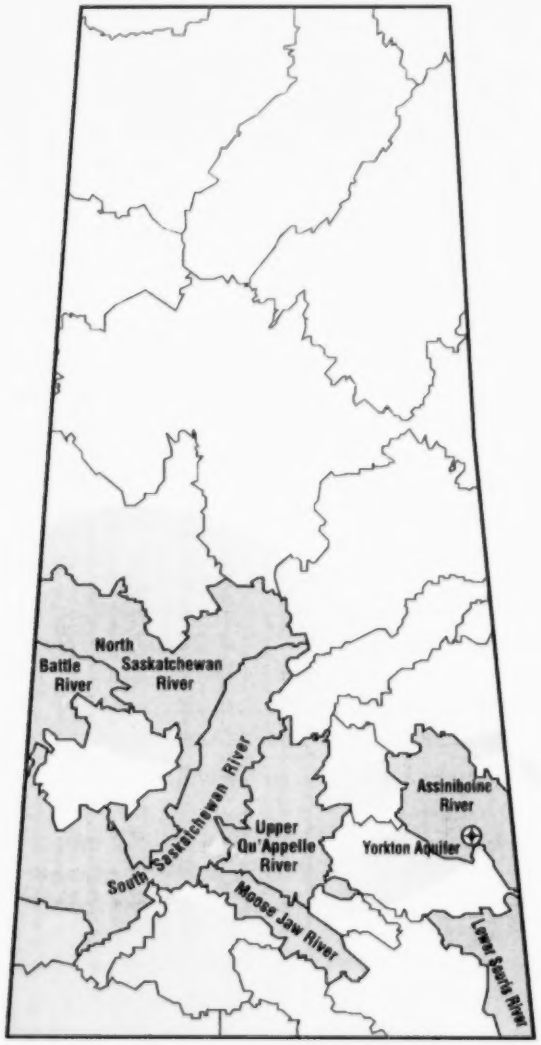


Figure 2 – Saskatchewan Watersheds

The Authority has drafted State of the Watershed Report indicators to monitor changes in watersheds over time based on available data. These indicators are currently under review by relevant experts external to the Saskatchewan Watershed Authority. A selection of these indicators was included in Saskatchewan Environment's State of the Environment Report 2005. A framework is currently being developed to provide "report card scores" that summarize the condition of watershed indicators in a manner easily understood by the public. The Authority anticipates publishing its proposed indicators in the State of the Watershed Reporting Framework in the autumn of 2005.

Prepare a Geographic Information Systems Strategic Plan to prioritize options for improving database quality. [2004 - 2005 planned result]

A Strategic Plan was developed for Geographic Information Systems to ensure that decision-making at all levels is effective, efficient and coordinated and that Authority staff are well placed (internally and externally) to match up data and information to those individuals needing it now and in the future. Implementation of the plan is scheduled for 2005.

Authority staff worked with Saskatchewan Environment to create spatially explicit Geographical Information Systems mapping layers representing Reservoir Development Areas and Authority-owned land parcels. These data sets have been incorporated into Saskatchewan Environment's Designated Areas data compilation/mapping project which will enable online mapping and distribution. This will greatly improve access to information for other government departments, private industry, and the general public.

Provide surface water data and analysis for the annual State of Drinking Water Quality Report. [2004 - 2005 planned result]

The Authority undertook a review of its data collection and analysis protocols to improve data quality and assessment. Subsequently, the Saskatchewan Water Quality Index was adopted to simplify the reporting of water quality data. The Index provides meaningful summaries of overall water quality and trends, while producing output that is useful to both resource managers and the general public

Ensure that watersheds are protected

Re-evaluate and re-design the Prairie Water Care program and the Rural Water Quality Advisory Program to provide monitoring and assessment support for the seven priority watershed planning processes and priority operational projects (structures, fish passages). [2004 - 2005 planned result]

The Rural Water Quality Advisory program was reviewed and redesigned. It continues to provide support to rural water users and seeks efficiency by concentrating work in priority areas. Three full-time temporary employees were also reallocated to support sampling, monitoring and assessment activities for the seven priority watersheds. The Prairie Water Care Program and Lake Stewardship Program have been merged into a new Lake Stewardship Program which involves volunteers in monitoring and stewardship activities on their lakes.

Deliver the North American Waterfowl Management program and activities. [2004 - 2005 planned result]

In 2004, Ducks Unlimited Canada, the Nature Conservancy of Canada, Saskatchewan Environment, Environment Canada and the Saskatchewan Watershed Authority delivered North American Waterfowl Management Plan programs. The Saskatchewan Watershed Authority coordinates the Plan in Saskatchewan, and approves all proposals before they are submitted to Canadian and American funding agencies. During 2004, proposals approved through this process raised $20.2 million, including $13.8 million from sources in the United States, for conservation work by the five delivery agencies in Saskatchewan. As part of the Prairie Habitat Joint Venture's revised Strategic Plan, the Saskatchewan North American Waterfowl Management Plan Implementation Committee began the process of revising waterfowl habitat goals for Saskatchewan.

Develop and implement plans with landowners and partners to reduce erosion channels in highly cultivated landscapes. Target areas include the east central portion of Saskatchewan and the Wood River and Carrot River basins. [2004 - 2005 planned result]

Three multi-year projects were undertaken in partnership with other agencies including the Conservation Learning Centre in the Carrot River Basin, and Ducks Unlimited in East Central Saskatchewan and the Upper Qu'Appelle River watershed. Projects focused on developing tools to encourage annual crop producers to adopt land practices that reduce sedimentation and nutrient loading. Other partners include Agriculture and Agri-Food Canada (Prairie Farm Rehabilitation Administration), Saskatchewan Agriculture and Food, and the Saskatchewan Soil Conservation Association.

Assist landowners in partnership with other agencies to develop plans to move or improve cattle wintering sites at 10 locations to reduce risk of contaminated runoff into streams and lakes. [2004 - 2005 planned result]

Authority staff worked with four cattle producers to become compliant with the requirements of *The Agricultural Operations Act*. The Prairie

Farm Rehabilitation Administration has historically provided survey and soil analysis services, but has discontinued this practice. This created a gap and the Authority is currently developing a pilot project with the long-term goal of providing required services.

In addition, the Lower Souris watershed group has identified winter site management along watercourses as a priority under the Environmental Agricultural Equivalent Plan. Several producers will be undertaking activities to resolve this issue with Agriculture Policy Framework funding and support from the Authority over the next three years.

Secure voluntary stewardship agreements with 68 landowners to conserve 5,000 hectares of native prairie, hold five workshops to publicize demonstration projects and communicate management information to producers, and deliver presentations regarding these activities at three conferences. [2004 - 2005 planned result]

The Authority secured voluntary stewardship agreements with 61 landowners to conserve 33,000 hectares of native prairie, held 15 workshops to publicize demonstration projects and communicate management information to producers, and delivered presentations regarding these activities at six conferences.

Assist landowners in partnership with other agencies to develop grazing and land-use programs to improve riparian and wetland health/condition at 50 sites. [2004 - 2005 planned result]

The Authority partnered with other agencies to help landowners develop grazing and land-use programs that improve riparian and wetland health/condition at 28 sites.

Develop/design prairie and upland management plans with landowners in partnership with other agencies to prevent soil erosion and conserve soil moisture at 50 sites. [2004 - 2005 planned result]

In 2004-2005, the Authority worked with its partners to design prairie and upland management plans to prevent soil erosion and conserve soil moisture at 52 sites.

Develop four targeted proposals to the Agricultural Policy Framework National Stewardship Program to assist in restoring the health of the watersheds. [2004 - 2005 planned result]

Four proposals were developed and administered by the Saskatchewan Watershed Authority in 2004 - 2005. The Authority also contributed to an additional 15 proposals, which will be administered by other agencies including the Four Creeks Watershed Advisory Committee Inc., Ducks Unlimited, the Saskatchewan Stock Growers Association, the Prairie Conservation Action Plan, the Conservation Learning Centre, the University of Saskatchewan, the Meachem Hills Forage Club, the First Nations Agricultural Council of Saskatchewan, the Moose Jaw Creek Watershed Association, the Saskatchewan Forage Council, the Prairie Agricultural Machinery Institute, the Twin Rivers Livestock, Economics and Forage Club, Nature Saskatchewan, and the Saskatchewan Sheep Development Board.

One of these proposals enabled the Four Creeks Watershed Advisory Committee Inc. to initiate development of Saskatchewan's first Environmental Agricultural Equivalent Plan under the Agricultural Policy Framework.

Conduct a review of the Authority's watershed enhancement program designed to address the preservation of wetlands, riparian areas and critical habitat. [2004 - 2005 planned result]

The watershed enhancement program was reviewed as part of a larger review of incentive based programs. As a result of the review goals

and objectives of the program were revised. The recommendations will be considered during budget development.

Survey and assess weirs, dams, levees, and low level crossing at five sites to determine their impedance to fish migration and their importance for fish spawning in watersheds selected for planning and at other priority structures. Where required, work with owners to design and install works such as fish passages to reduce impacts and re-establish passage. [2004 - 2005 planned result]

The Authority assessed and monitored fish passage issues at the Valeport Marshes on Last Mountain Lake, Fairy Hill Marsh on the Qu'Appelle River, the Rapid River Outlet at Lac La Ronge Dam, and the Overflowing River at the outlet of Leaf Lake.

Design and construction work included a new control at Fairy Hill Marsh, levee breaches at Valeport Marshes, and a new riffle control and dam removal at Leaf Lake. The Authority also provided feasibility design work for the proposed construction of a new fishway at Lac La Ronge. Existing water control structures at Saginas and Woody Lake outlets and Moose Mountain Creek were monitored for fish passage during the spring and fall migration/spawning seasons.

Measurement Results

Number of completed watershed and aquifer plans

Protection of source waters and watersheds will be achieved through a cycle of planning, implementing plans and monitoring health of watersheds. Preparing the plans is an essential step because it identifies the most important activities which must be undertaken to protect the watershed. The number of plans underway and completed is thus a measure of effort and progress on one aspect of source water protection.

Since the Saskatchewan Watershed Authority was created in October 2002, it has designed the planning process and initiated plans in six watersheds and one aquifer.

Performance Measure	April 2004	March 2005
Number of completed watershed and aquifer plans	**0 completed 7 underway**	**0 completed 7 underway**

Source: Saskatchewan Watershed Authority

Water Quality Index ratings for watersheds within the province

The Water Quality Index is a good measure of overall trends in water quality that may not otherwise be apparent through individual water quality test results. Water quality from surface water sources tends to change over seasons and may change over successive years as a result of pollution or other water management practices.

The revised Saskatchewan Water Quality Index was applied to sites across four major watersheds by the end of the 2003-04 fiscal year (South Saskatchewan, North Saskatchewan, Qu'Appelle and Moose Jaw rivers). To generate the Water Quality Index ratings certain data criteria need to be met. Restructuring of existing databases and transition over to the new Saskatchewan Environment Environmental Management Therefore, no update data is reported.

To resolve and streamline this difficulty in the future, an automated means of having the Water Quality Index calculations is being developed in 2005-06.

Data is compared to the Provincial Surface Water Quality Objectives. The Water Quality Index is calculated based upon the number of exceedances, the magnitude of the exceedances, and the frequency of the exceedances of each contaminant. The resultant metric is displayed in an easy to understand rating scale from 0 to 100 (100 being pristine non-impacted water quality).

Performance Measure	15 year Average
Water Quality Index ratings for watersheds within the Province	**Qu'Appelle** Fair to Good **South Saskatchewan** Good to Excellent **North Saskatchewan** Good to Excellent **Saskatchewan River Basin** Good to Excellent

Source: Saskatchewan Environment and Saskatchewan Watershed Authority monitoring results

Goal 2: Healthy Watersheds and Aquifers

Objective 2: *Public is Aware of the Importance of Healthy Watersheds*

Many actions to protect water can only be accomplished at the initiative of or in partnership with the citizens of the Province. Success of the Authority's programs is therefore dependant on the public's understanding of the importance and benefits of source water protection.

Key Results

Implement a public education strategy through support of the Safe Drinking Water Strategy in cooperation with other departments, through preparing feature articles for newspapers and partner and trade magazines, and providing information on the Authority's website (www.swa.ca) [2004 - 2005 planned result]

The Authority led the development of an interdepartmental public education plan as part of its commitment under the Long Term Safe Drinking Water Strategy. The plan requires delivery agencies (the Authority; SaskWater; Saskatchewan Environment; Saskatchewan Health; Saskatchewan Government Relations and Aboriginal Affairs; Saskatchewan Agriculture, Food and Rural Revitalization) to increase their current knowledge, develop a better understanding of local water issues, target information to specific audiences, and devise methods to deliver information effectively. Implementation of the plan began in January 2004 and has continued through the past year.

The Authority produced six information-focused advertisements designed to raise readers' general awareness of issues pertaining to water quality and quantity in the province. The advertisements, titled *WaterLines*, appeared in 44 weekly newspapers in Saskatchewan's seven priority planning watersheds.

The Authority manages the Provincial Government's Water Inquiry Line as a clearinghouse for all water related inquiries. In 2004-2005, the Provincial Water Inquiry Line received a total of 1,045 inquiries.

Deliver information in support of our programs and our partner programs by surveying residents of priority watersheds; publishing the Prairie Update newsletter; co-ordinating website design and content; preparing feature articles for weekly newspapers, partner and trade magazines; and participating in major tradeshows including Canadian Western Agribition, Farm Progress, Canadian Water Resources Association, Saskatchewan Urban Municipalities Association, Saskatchewan Association of Rural Municipalities and the major education conferences in the province. [2004 - 2005 planned result]

The *Prairie Update* newsletter continues to highlight stewardship efforts through stakeholder profiles and watershed features, and is attracting interest from outside the rural community. Four issues were produced and distributed to approximately 1,500 prairie stewardship partners and members of Watershed Advisory committees throughout the province. In addition, two new newsletters, the *North West Grazing News* and the *East Central Update*, were produced and distributed to stakeholders in their respective areas.

The Authority's website provides information on the Authority's mandate, responsibilities, plans and activities. The website features near real-time stream flow and water level information, downloadable publications, interactive maps that guide users through watersheds and basins, priority work areas and landowner demonstration projects. The education section features Project WET (Water Education for Teachers), Project WILD, Climate Change, Prairie Water Care, Sturgeon Outreach Programs, and Ecotourism community partnerships.

A number of new publications were produced, including a North American Waterfowl Management Plan brochure. Most publications are available in downloadable format on the Authority website. A number of feature articles detailing Authority programs appeared in local papers, electronic media and stakeholder newsletters. This media exposure facilitated program delivery by raising awareness and providing watershed neighbours with an opportunity to learn from one another.

To increase awareness of the Authority's programs and services, Authority staff spoke to many groups and attended several major public trade shows and conferences, including the Western Canada Farm Progress Show, the Canadian Western Agribition, the Saskatchewan Association of Rural Municipalities Annual Convention and the Saskatchewan Urban Municipalities Association Convention. In addition, the Authority attended several major education conferences in the province, including Sciematics 2004 and the Western Canadian Association for Student Teaching 2005.

Deliver education programs (Project WET, Project Wild, Climate Change, etc.) which are directly linked to the Saskatchewan curricula, by offering workshops to teachers in the Kindergarten to Grade 12 system, and students in the Faculty of Education at the University of Regina and the University of Saskatchewan. [2004 - 2005 planned result]

The focus of activities during 2004-2005 was directed by the Authority's 2003-2004 research on Saskatchewan educators' use of Project WET. This survey of over 600 educators suggested that the use of the material after training was above the 70 percent level, but as found in a literature review on Project WILD in North America, use of the instructional materials dropped off after about three or four years if there was no refresher training. Therefore activities during 2004-2005 focused on providing this refresher training.

During the year, more than 700 educators participated in Climate Change, Project WET, and Project WILD training. Target groups for training included:

- the Northern Teacher Education Program
- the Saskatchewan Urban Teacher Education Program
- the First Nations University of Canada
- the University of Regina - Faculty of Education, and
- the University of Saskatchewan - College of Education

Develop and implement a plan to track public opinion and public awareness of watershed issues, including public opinion polling and other tools as appropriate [2004 - 2005 planned result]

A telephone survey of over 600 residents in the Upper Qu'Appelle watershed was conducted in April 2004 to develop baseline information and determine trends relating to water usage and awareness. Thirty-one communities and their adjoining rural municipalities in the Upper Qu'Appelle watershed were involved in the survey. The information gathered will be used in the work plan for the Authority's Marketing and Education unit.

Measurement Results

A performance measure related to this objective was under development during 2004 - 2005.

Financial Statements

for the fiscal year ending
March 31, 2005

Management's Responsibility for Financial Reporting

Management has prepared the financial statements of the Authority in accordance with Canadian generally accepted accounting principles for government organizations. The financial data included elsewhere in this report is consistent with the financial statements and the underlying information from which the Authority prepared these financial statements.

Management has the primary responsibility for the integrity and objectivity of the financial statements. To fulfill this responsibility, the Authority maintains appropriate systems of internal controls, policies and procedures. These systems provide reasonable assurance that assets are safeguarded and that the books and records reflect the authorized transactions of the Authority.

MeyersNorrisPenny LLP, the Authority's external auditors, have examined the March 31, 2005 financial statements and their report follows.

The Board of Directors of Saskatchewan Watershed Authority has examined and approved the statements.

On behalf of the Authority,

Stuart Kramer
President

May 6, 2005

Auditors' Report

To the Members of the Legislative Assembly Province of Saskatchewan:

We have audited the statement of financial position of Saskatchewan Watershed Authority as at March 31, 2005 and the statements of operations and accumulated surplus, change in net financial assets and cash flows for the year then ended. These financial statements are the responsibility of the Authority's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these financial statements present fairly, in all material respects, the financial position of the Saskatchewan Watershed Authority as at March 31, 2005 and the results of its operations and its cash flows for the year then ended in accordance with Canadian generally accepted accounting principles for government.

Regina, Saskatchewan

May 6, 2005

Meyers Norris Penny LLP

Chartered Accountants

Statement 1

Statement of Financial Position

As at March 31

	2005	2004
	(Thousands of Dollars)	
FINANCIAL ASSETS		
Cash	$ 1,653	$ 2,019
Accounts receivable	4,955	3,803
	6,608	5,822
LIABILITIES		
Accounts payable	1,911	1,652
Deferred revenue (note 3)	1,471	1,216
Other long-term obligations (note 4)	721	692
	4,103	3,560
NET FINANCIAL ASSETS	2,505	2,262
NON FINANCIAL ASSETS		
Tangible capital assets (note 6)	303,711	303,805
Prepaid expenditures and supplies	177	184
	303,888	303,989
ACCUMULATED SURPLUS	$ 306,393	$ 306,251

Commitments and contingencies (note 7)

See accompanying notes

On behalf of the Board: Lily A Utenhouse

Director

Statement 2

Statement of Operations and Accumulated Surplus

Year Ended March 31

	Budget (note 10)	2005	2004
		(Thousands of Dollars)	
REVENUE			
Government of Saskatchewan			
- General Revenue Fund	$ 6,118	$ 6,118	$ 6,846
- Fish and Wildlife Development Fund	876	828	828
Water revenue	11,089	10,468	10,719
Contract revenue (Schedule 1)	1,125	1,052	1,385
Other	1,751	1,734	1,648
	20,959	20,200	21,426
EXPENSES (Schedule 2)			
Operations	7,735	6,452	6,872
Water management	5,503	5,326	4,973
Grants to clients (note 5)	2,109	1,344	1,574
Water management infrastructure	150	291	127
Stewardship	2,085	3,120	2,435
Interest	40	39	41
Amortization of tangible capital assets	6,452	3,486	3,380
	24,074	20,058	19,402
Annual Surplus (Deficit)	(3,115)	142	2,024
Accumulated Surplus - beginning of year	306,251	306,251	304,227
Accumulated Surplus - end of year	$ 303,136	$ 306,393	$ 306,251

See accompanying notes

Statement 3

Statement of Change in Net Financial Assets

Year Ended March 31

	2005	2004
	(Thousands of Dollars)	
ANNUAL SURPLUS	$ 142	$ 2,024
Acquisition of tangible capital assets	(3,401)	(3,659)
Amortization of tangible capital assets	3,486	3,380
Gain on sale of tangible capital assets	-	(8)
Proceeds on sale of tangible capital assets	9	8
	236	1,745
Usage (Acquisition) of prepaid expenses and supplies	7	(48)
Increase in net financial assets	243	1,697
Net financial assets – beginning of year	2,262	565
Net financial assets – end of year	$ 2,505	$ 2,262

See accompanying notes

Statement 4

Statement of Cash Flows

Year Ended March 31

	2005	2004
	(Thousands of Dollars)	
CASH PROVIDED BY (USED IN)		
Operating activities:		
Surplus for the year	$ 142	$ 2,024
Items not affecting cash:		
Amortization of tangible capital assets	3,486	3,380
Net change in non-cash balances relating to operations:		
Accounts receivable and prepaids	(1,145)	501
Accounts payable and long-term obligations	288	(236)
Deferred revenue	255	(260)
Gain on sale of tangible capital assets	-	(8)
	3,026	5,401
Capital transactions:		
Acquisition of tangible capital assets	(3,401)	(3,659)
Proceeds on sale of tangible capital assets	9	8
	(3,392)	(3,651)
Change in cash during the year	(366)	1,750
Cash – beginning of year	2,019	269
Cash – end of year	$ 1,653	$ 2,019

See accompanying notes

Notes to the Financial Statements

March 31, 2005

1. STATUS OF THE SASKATCHEWAN WATERSHED AUTHORITY

The Saskatchewan Watershed Authority (the Authority) was established on October 1, 2002, under the authority of *The Saskatchewan Watershed Authority Act*. The Authority is a Treasury Board Crown corporation within the meaning of *The Crown Corporations Act, 1993*. The Authority is a continuing corporation of the Saskatchewan Wetland Conservation Corporation, established by Order in Council 29/90 dated January 10, 1990.

On October 1, 2002, the Saskatchewan Water Corporation transferred involvement in water management activities to the Saskatchewan Watershed Authority. These activities include the operations, maintenance and rehabilitation of provincially-owned water infrastructure including dams and conveyance channels, as well as the hydrometric, forecasting and regulatory functions of the Corporation.

In accordance with the provisions of *The Saskatchewan Watershed Authority Act*, the Authority's general powers and purposes are to manage, administer, develop, control and protect the water, watersheds and related land resources of Saskatchewan and to promote the economical and efficient use, distribution and conservation of the water, watersheds and related land resources.

2. SIGNIFICANT ACCOUNTING POLICIES

These financial statements have been prepared using Canadian generally accepted accounting principles appropriate for the public sector. The following accounting principles are considered to be significant:

Tangible Capital Assets
Capital assets are recorded at cost. Internally provided engineering and technical services are capitalized at charge out rates designed to recover salaries, benefits and overhead. The objective of this policy is to recognize the approximate value of design, supervision and administrative services rendered by Authority employees on construction projects. As well, the Authority capitalizes interest expense on debt relating to specific construction projects. Charges for amortization are calculated at the following annual rates:

Tangible Capital Assets	Method	Rate
Buildings and leaseholds	straight-line	2.5% to 5%
Maintenance equipment	diminishing balance or straight-line, as appropriate	6.67% to 30%
Office equipment	straight-line	10% to 30%
Water infrastructure	straight-line	1.67% to 2.5%

March 31, 2005

Grants from the General Revenue Fund
Under the authority of Section 26 of *The Saskatchewan Watershed Authority Act*, the Authority receives grants from the General Revenue Fund out of monies appropriated by the legislature. These grants are recorded as revenue when received and are used to fund grant programs, water management infrastructure rehabilitation expenditures and operations.

Revenue Recognition
Contractual revenue received by the Authority from third parties for specific purposes is recognized as revenue in the year in which the related expenditures are incurred. Other contractual revenues are recognized as revenue when received or receivable if the amount to be received can be reasonably estimated and collection is reasonably assured.

Grants to Clients
Grants provided to clients for a variety of programs are recorded as an expenditure to the Authority if the final approval for the grant payment was made during the year. Where the Authority enters into contractual agreements for project construction under various assistance programs, expenditures are accounted for on an accrual basis.

Post Retirement Benefits Other Than Pension
The Authority administers a benefit relating to a retirement allowance which is paid to eligible employees upon retirement. The Authority has adopted the accrual method of accounting for this benefit whereby the cost of providing the benefits is recorded when the related services of employees are performed.

Measurement Uncertainty
The preparation of financial statements in conformity with Canadian public sector generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenditures during the reporting period. Significant areas requiring the use of management estimates related to the estimated cost of tangible capital assets and useful lives of assets for amortization periods.

March 31, 2005

3. DEFERRED REVENUE

At year-end, the Authority has received funding for various projects but has not yet completed the projects. The balance that remains in deferred revenue includes the depredation fund established for the Souris Basin project to deal with wildlife and waterfowl depredation prevention and compensation.

	2005	2004
	(Thousands of Dollars)	
Balance, beginning of year	$ 1,216	$ 1,182
Contractual revenues received	281	65
Amortization of revenue	(26)	(31)
	$ 1,471	$ 1,216

4. OTHER LONG-TERM OBLIGATIONS

The retirement allowance, which is an unfunded employee benefit, is discounted at an interest rate of 4.50% (2004 - 4.25%). The amount of allowances disbursed in the year were $14,030 (2004 - $33,100).

5. GRANTS TO CLIENTS

Included in expenditures are grants or assistance provided to various persons and organizations to carry out a variety of programs administered by the Authority. In addition, where the condition of financial assistance for certain programs requires the Authority to provide engineering or technical services, an allocation of salaries to grant expenditure is made. Particulars of these grants, including salary allocation of $346,800 (2004 - $430,800), by program, are as follows:

	2005	2004
	(Thousands of Dollars)	
Flood Control & Drainage	$ 643	$ 653
Water Quality	149	348
Stewardship	425	573
Pumping Equipment Rental Program	127	-
	$ 1,344	$ 1,574

March 31, 2005

6. TANGIBLE CAPITAL ASSETS

	2005			2004
	(Thousands of Dollars)			
	Cost	Accumulated Amortization	Net Book Value	Net Book Value
Land	$ 5,155	$ -	$ 5,155	$ 5,155
Buildings and leaseholds improvements	199	123	76	93
Maintenance equipment	1,927	1,394	533	290
Office equipment	593	380	213	151
Water infrastructure	371,467	73,733	297,734	298,116
	$ 379,341	$ 75,630	$ 303,711	$ 303,805

7. COMMITMENTS AND CONTINGENCIES

Contractual Commitments

As of March 31, 2005, the Authority has outstanding commitments of $1,116,300 (2004 - $527,700) for construction contracts, consulting agreements and land owner agreements.

Leases

The Authority has entered into various operating lease agreements with the following minimum lease payments:

	(Thousands of Dollars)
2006	$ 993
2007	877
2008	845
2009	522
2010	76
2011 and thereafter	-
	$ 3,313

Litigation

The Authority is party to a number of lawsuits and has provided for these claims in its accounts in accordance with management's best estimates and the advice received from legal counsel. The Authority intends to account for any differences which may arise, between amounts provided and amounts expended, in the period in which the claims are resolved.

March 31, 2005

8. RELATED PARTY TRANSACTIONS

Included in these financial statements are transactions with various Saskatchewan Crown corporations, departments, agencies, boards and commissions related to the Authority by virtue of common control by the Government of Saskatchewan and non-Crown corporations and enterprises subject to joint control or significant influence by the Government of Saskatchewan (collectively referred to as "related parties").

Routine operating transactions with related parties are settled at prevailing market prices under normal trade terms. These transactions and amounts outstanding at year end, are as follows:

	2005	2004
	(Thousands of Dollars)	
Water, contract and other revenue	$ 10,358	$ 12,243
Expenditures	2,706	2,627
Accounts receivable	3,718	2,325
Accounts payable	362	229

Other amounts and transactions due to and from related parties and the terms of settlement are described separately in these financial statements and the notes thereto.

On June 30, 2004, SaskWater transferred involvement in the mobile equipment rental program to the Authority. Effective this date assets related to this activity were purchased at their book value ($364,000).

9. FINANCIAL INSTRUMENTS

The Authority's recognized financial instruments consist of cash, accounts receivable, accounts payable and other long-term obligations.

Credit Risk

The Authority is exposed to credit risk from the potential default of customers. However, approximately one-half of the Authority's accounts receivable are from related parties, other government corporations and agencies.

Fair Values

The fair values of cash, accounts receivable and accounts payable approximate their carrying value due to the short-term nature of these instruments. Fair values of other long-term obligations approximate their carrying values. These were estimated using current discount rates.

10. BUDGET FIGURES

The budget figures are presented for comparison purposes. The Authority's Board of Directors approved this budget on March 17, 2004. The budgeted amount for amortization of tangible capital assets was based on a previous year estimate.

Schedules for Year Ended March 31

Schedule 1 – Contract Revenue

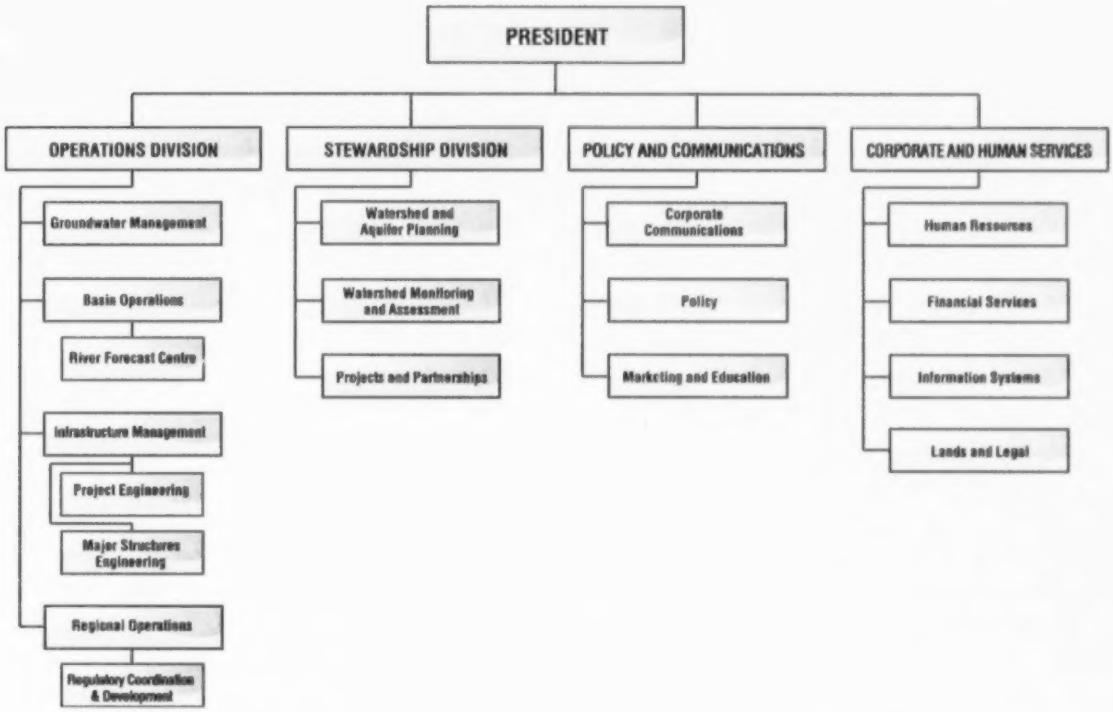
	2005	2004
	(Thousands of Dollars)	
Canadian Wildlife Service	$ 250	$ 250
Environment Canada	329	387
Wildlife Habitat Canada	71	40
United States – Federal & State	6	184
Other	396	524
	$ 1,052	$ 1,385

Schedule 2 – Expenses by Program

	Operations	Water Management	Grants to Clients	Water Management Infrastructure	Stewardship	Interest & Amortization	2005 Total	2004 Total
							(Thousands of Dollars)	
Salaries and benefits	$ 11,482	$ -	$ -	$ -	$ -	$ -	$11,482	$11,103
Travel and other staff costs	469	264	69	13	334	-	1,149	1,073
Professional services	149	175	37	28	37	-	426	368
Office supplies	671	43	4	3	15	-	736	765
Materials	10	116	7	2	46	-	181	170
Contractual services	226	544	19	2	183	-	974	951
Cash grants	-	-	824	-	-	-	824	938
Salary allocations	(8,020)	3,843	347	238	2,522	-	(1,070)	(1,006)
Other expenses	1,465	341	37	5	(17)	3,525	5,356	5,040
Total	$ 6,452	$ 5,326	$ 1,344	$ 291	$ 3,120	$ 3,525	$20,058	$ 19,402

Appendix 1

Organizational Structure



Organization by function

Regions and Offices

★ Head Office
▲ Regional Office

Saskatchewan Watershed Authority Advisory Committee (as of March 31, 2005)

- Dr. Ray Fast, Saskatoon, Partners for the Saskatchewan River Basin (Committee Chair)
- Marie Ann Bowden, Saskatoon, Saskatchewan Eco-Network
- Solomon Carriere, Cumberland House
- Fred Clipsham, Regina, Saskatchewan Urban Municipalities Association
- Cynthia Edwards, Regina, Ducks Unlimited Canada
- James Harvey, Saskatoon, Saskatchewan Irrigation Projects Association
- Beth Henderson, Ponteix, Saskatchewan Women's Agricultural Network
- Larry Kratt, Calgary, Canadian Petroleum Producers
- Susan Lamb, Saskatoon, Meewasin Valley Authority
- Larry Lenton, Regina, Agriculture and Agri-Food Canada: Prairie Farm Rehabilitation Administration
- Merlin W. McFarlane, Rose Valley, Saskatchewan Conservation and Development Association
- Chief Larry Oakes, Maple Creek (Nekaneet First Nation), Federation of Saskatchewan Indian Nations
- Terry Ostrander, Swift Current, Saskatchewan Stock Growers Association
- George Smith, Pinehouse Lake
- Don Taylor, Bredenbury, Saskatchewan Association of Rural Municipalities
- Randy Wells, Grandmother's Bay Reserve
- Ray Wild, Silton, Saskatchewan Wildlife Federation
- Doug Wilson, Big Shell Lake, Provincial Association of Resort Communities of Saskatchewan

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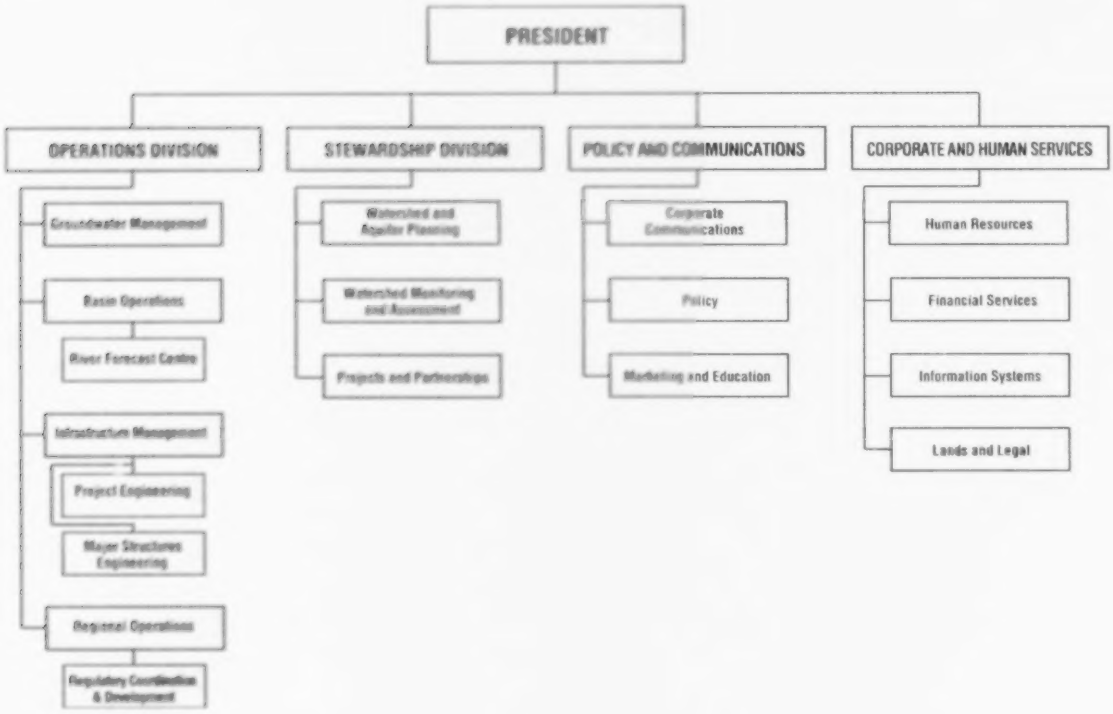
Organizational Structure



Organization by function

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For More Information

More information can be obtained
by visiting the Authority's website at
www.swa.ca, calling its head office
in Moose Jaw at 306-694-3900, or contacting
the water inquiry line toll free at
1-866-SASK-H2O
(1-866-727-5420).

Saskatchewan Watershed Authority
Public Accounts for the Year Ended March 31, 2005

GENERAL COSTS

Listed are payees who received $50,000 or more for the provision of goods and services:

ABC Electric & Furniture Ltd.	$	117,809
Acadia Construction		162,638
Armtec Limited		206,006
Business Furnishings		54,057
E.G. Services Ltd.		50,389
Fairford Developments Inc.		574,111
H.C.L. Construction Ltd.		431,363
Henderson Insurance Inc.		70,109
Hoskin Scientific Limited		77,401
Information Services Corp.		74,173
J.D. Mollard and Associates		58,420
J.J. Barnicke Saskatoon Ltd.		114,513
Jump.Ca		235,928
K-Mac Projects Ltd.		72,051
Kontzamanis Graumann Smith		54,235
Moose Range C.A.A.		51,967
Perma Engineered Sales		113,878
Quest Communications Group		68,554
R.J. Tulik & Son		129,048
Receiver General for Canada		388,841
Royal Bank of Canada – Chaseheld		55,614
Sask Power		109,372
Sask Property Management Corporation		1,038,734
Sask Research Council		191,241
Sask Tel CMR		152,138
Sask Tel Mobility		55,617
Sask Water Corporation		89,125
Stonechild & Racine Law Firm		70,000
Wawryk Associates Ltd.		101,220
Westridge Construction Ltd.		190,655
Supplier Payments Under $50,000		2,199,889
Total Payments to Suppliers	**$**	**7,359,096**

PERSONAL SERVICES

Listed are individuals who received payments for salaries, wages and taxable benefits which total $50,000 or more:

Name	**Amount**	
Acharya, Mohanath	$	57,368
Anderson, Donald		52,296
Arnold, Gerry		52,848
Ashdown, Brad		51,420
Barkway, Terry		79,224
Belitski, Reynold		60,411
Bishko, Andre		50,536
Bryck, Murray		86,016
Carles, Bob		103,866
Chamulak, Terry		67,133
Chandna, Dharam Pal		69,396
Dill, Donald		86,016

Duncan, William	105,792
Durbin, John	68,940
Dybvig, Wayne	126,030
Eberle, Harvey	59,160
Euteneier, Dalvin	77,892
Fahlman, John	78,356
Feigel, Jeff	50,076
Fossum, Sharilee	101,038
Fox, Frank	59,160
French, Malcolm	69,396
Gehl, Peter	66,720
Geissler, Vern	53,408
Gerhart, James	92,568
Gobert, Garnet	69,743
Graham, Kevin	52,296
Graham, Larry	59,461
Grajczyk, Martin	65,376
Grigg, John	59,456
Hagen, Gordon	59,459
Hanley, P Terry	88,179
Harrison, Tom	79,608
Hjertaas, Dale	90,978
Hosler, Lyle	69,396
Hymers, Eldon	86,016
Hymers, Terry	92,568
Ireland, Bryan	106,591
Johnson, Douglas	92,568
Johnson, Russell	50,727
Kaminski, Thomas	69,743
Kilgour, Douglas	69,396
Kirkness, Robert	65,376
Kozusko, Douglas	69,396
Leslie, Cameron	55,638
Maciag, Joseph	78,126
Mackisey, Roberta	52,992
McDonald, Glen	84,482
McIntosh, Harlow	61,942
McMaster, Glen	63,951
Metz, Sharon	68,247
Molde, Clinton	86,016
Newcombe, Donald	59,160
Oegema, Bart	69,396
Olson, Jeffrey	54,156
Parker, Robert	86,446
Prouten, Kevin	59,870
Rogal, Casmir	67,170
Ross, Susan	85,062
Rowlett, Dwayne	75,109
Shaheen, Nolan	91,242
Sketchell, Joanne	86,016
Soar, Denise	52,937
Soulodre, Etienne	51,412
Springer, Robert	56,463

Sturby, Michelle	50,023
Suchan, Murray	58,566
Taylor, Barry	65,376
Thomson, Warren	59,160
Tod, Robin	70,656
Tuchscherer, Jonathan	90,369
Waggoner, James	86,016
Wiebe, Robert	86,016
Will, Gordon	74,925
Young, Allan	56,964
Salaries and taxable benefits under $50,000	4,655,066
Total Salaries and taxable benefits	**$ 10,020,369**
Employee Benefits	1,497,546
Employee Travel and other costs	1,148,938
Total Employee Costs	**$ 12,666,853**
TOTAL EXPENDITURES	**$ 20,025,949**

Government of
Saskatchewan